

## REMARKS

Favorable reconsideration and allowance of this application are requested.

### **1. Discussion of Claim Amendments**

By way of the amendment instructions above, the pending claims have been revised so as to clarify the claimed subject matter and to provide a clear line of patentable demarcation with regard to the references of record. Claim 2 has been canceled as redundant and the dependencies of claims 8-9 and 11 changed so as to provide antecedent basis for the therein define subject matter.

Accordingly, upon entry of this amendment claims 1 and 3-11 will remain pending herein for which favorable reconsideration and allowance are solicited.

### **2. Response to 35 USC §112 Rejection**

The amendments presented above are believed to render moot the rejection advanced against claim 6 under 35 USC §112, second paragraph. Withdrawal of the same is therefore in order.

### **3. Response to 35 USC §102(b) Rejection**

Reconsideration and withdrawal of the rejection advanced against claims 7 and 10 under 35 USC §102(b) are requested. In this regard, according to applicants' understanding, this rejection is based on an apparently erroneous interpretation of the Lee reference (USP 5,384,404).

In this regard, applicants note that the teaching of Lee (see Figure), the flue gases are heat exchanged with only **one process stream**, in which case of course two heat exchanger units are needed since indirect heat exchange is disclosed by Lee. However, Lee only discloses a well known molten salt furnace where molten salt is used

as heat exchange medium, but this is only one heat exchange step where heat of the flue gases are exchanged with one process stream. Furthermore, claims 7 and 10 as amended above require a second heat exchanger where the heat of the flue gases is exchanged with a second process stream and a third heat exchanger where the heat of the flue gases is heat exchanged with fresh air. Lee does not disclose a second and third heat exchanger. Consequently, all independent claims are novel in view of the cited Lee reference.

#### **4. Response to 35 USC §103(a) Rejections**

Claims 1, 3 and 6 attracted a rejection under 35 USC §103(a) as allegedly "obvious" and hence unpatentable over Stark (USP 4,784,069) in view of Hardeveld (USP 4,408,046). Applicants note in this regard that Stark does not relate to a process for the production of melamine. Furthermore, neither reference discloses that before the heat exchange between flue gases and fresh air two heat exchange steps with process streams in the melamine process are conducted. As such, the amendment of claim 1 to include therein the subject matter of prior claim 2 renders moot the rejection advanced on the basis of Stark and Hardeveld.

Prior claims 2, 4-5, 8-9 and 11 attracted a rejection under 35 USC §103(a) as allegedly "obvious" and hence unpatentable over Stark in view of Hardeveld and further in view of Wood et al (USP 6,599,119). In this regard, applicants note that, like Stark, Wood et al does not relate at all to a process for the production of melamine. Furthermore, according to the first embodiment of Stark as shown in Figure 1, the exhaust gases of the gas turbine are used in direct heat exchange with a first process fluid and then two subsequent heat exchange steps are conducted. In the alternative embodiment according to Figure 2 in Stark, the exhaust gases of the gas turbine are used to heat fresh combustion air.

Wood et al. explicitly teaches to use the flue gases directly to preheat the combustion air as is also disclosed with respect to the alternative embodiment according to Figure 2 of the Stark reference which has to be avoided according to the present invention as defined in the pending claims herein.

Furthermore, Wood et al clearly teaches in the opposite direction. Although Wood et al is dealing with the problem of NO<sub>x</sub> reduction, the measures taken in order to reduce the NO<sub>x</sub> content are different from the measures of the present invention. First of all, the teaching of Wood et al requires a catalytic and absorption unit in order to reduce the NO<sub>x</sub> content of the exhaust gas. In addition to this unit, part of the exhaust gas is recycled and mixed with the combustion air. By doing so the oxygen content of the combustion air is reduced since it is mixed with exhaust gases having a considerably reduced oxygen content, thereby, due to the low oxygen content, less NO<sub>x</sub> is formed during combustion. Thus, the teaching of Wood et al is not focused on heat exchange with the combustion air, but on mixing of combustion air with exhaust gases. In contrast thereto claim 1 as amended requires two heat exchange steps *in addition to* the heat exchange with combustion air. Consequently Wood et al cannot suggest that the NO<sub>x</sub> content is reduced in a process according to the present invention.

Thus, the technical fact shown by the comparative tests present in the present application is not derivable from the teaching of the cited prior art references.

Westfall (USP 2,943,088) fails to cure the deficiencies noted above with respect to Stark and Hardeveld. Accordingly the rejection advanced against claim 5 under 35 USC §103(a) should be withdrawn also.

In closing, applicants note that even combining Lee et al and Hardeveld – i.e., the references which teach a melamine process using a salt furnace with a first heat exchange step -- with Stark or Wood et al would not lead to the process as presently claimed since then a person skilled in the art would use the flue gases coming from the

salt furnace to preheat the combustion air for the salt furnace which is to be avoided according to the present invention. Furthermore, the present application contains comparative test data showing the difference of the subject-matter of the present invention as shown in example 1 and a subject-matter as comparative experiment that would be the combination of either Lee or Hardeveld with Stark or Wood et al.

Thus, the present application clearly shows the advantage of the invention compared even against a subject-matter that is created by combinations of teachings of prior art references as suggested by the Examiner.

Withdrawal of all rejections advanced under 35 USC §103(a) is therefore in order.

#### **5. Fee Authorization**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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